ORDER NO. ARD81070076C4-07

Service Manual

8-Track Tape Deck

RS-856

Stereo 8-Track Record/Playback Deck
with LED Level Meters

RQ-831 MECHANISM SERIES

Specifications

Track system:	8-track 2-channel stereo recording and playback
Recording system:	AC bias (40 kHz)
Tape speed:	9.5 cm/s (3-3/4 ips.)
Wow and flutter:	0.15% (WRMS)
Tape:	8-track cartridge tape
Frequency response:	50 — 12,000 Hz
Signal-to-noise ratio:	45 dB
Inputs:	2-Mic; —72 dB (0.2 mV)/200 — 1,000 Ω
	2-Line; —24 dB (60 mV)
Outputs:	2-Line; 600 mV/50 kΩ
	1-Headphone; 60 mV/8 Ω
Head:	3-in-1, 8-track 2-channel stereo head
Fast forward speed:	Approx. 19 cm/s (7-1/2"/s)
Power requirement:	AC; 90 — 109/110 — 125/200 — 219/220 — 250 V, 50-60 Hz
	Pre-set power voltage 110 — 125 V, 220 — 250 V for Europe
Power consumption:	9 W
Dimensions:	315.0 mm (W) × 200.0 mm (H) × 92.5 mm (D)
	[12-1/2" (W) × 7-7/8" (H) × 3-5/8" (D)]
Weight:	2.8 kg (6 lbs, 7 oz)

Specifications are subject to change without notice.

Panasonic®

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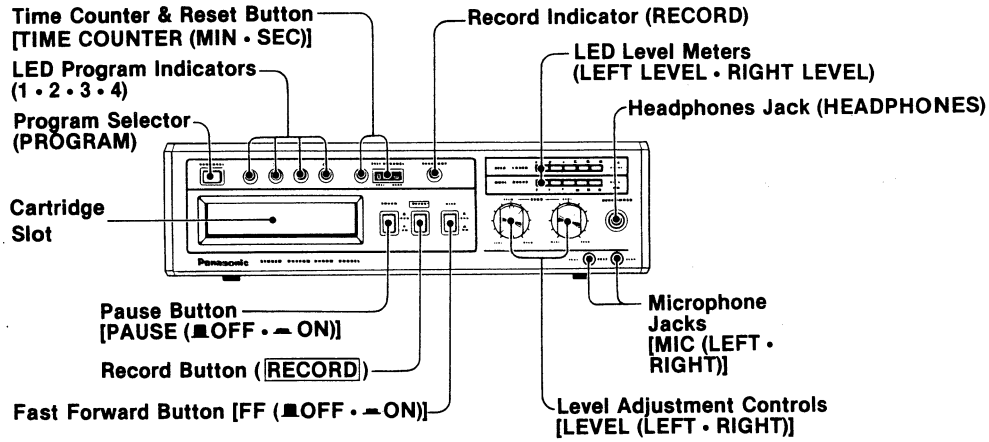
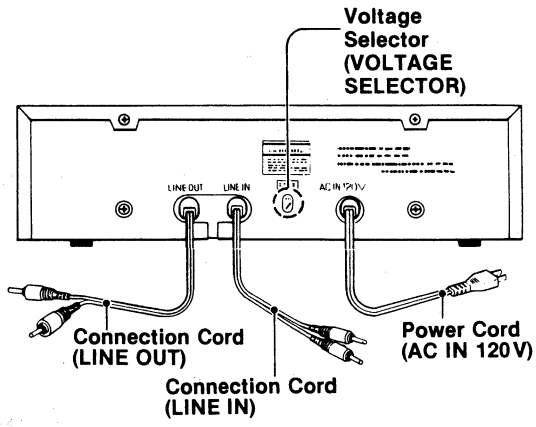
CONTENTS

ITEM	PAGE
LOCATION OF CONTROLS AND COMPONENTS	1
DISASSEMBLY INSTRUCTIONS	2
DISASSEMBLY NOTE	3
ASSEMBLY NOTES	3
MEASUREMENT AND ADJUSTMENT	4
SCHEMATIC DIAGRAM	5
CIRCUIT BOARDS AND WIRING CONNECTION DIAGRAM	6
ELECTRICAL PARTS LOCATION	6
MECHANICAL PARTS LOCATION	7
CABINET PARTS LOCATION	7

LOCATION OF CONTROLS AND COMPONENTS


Time Counter & Reset Button [TIME COUNTER (MIN • SEC)]
LED Program Indicators (1 • 2 • 3 • 4)
Program Selector (PROGRAM)
Cartridge Slot
Pause Button [PAUSE (OFF • ON)]
Record Button (RECORD)
Fast Forward Button [FF (OFF • ON)]
Record Indicator (RECORD)
LED Level Meters (LEFT LEVEL • RIGHT LEVEL)
Headphones Jack (HEADPHONES)
Microphone Jacks [MIC (LEFT • RIGHT)]
Level Adjustment Controls [LEVEL (LEFT • RIGHT)]



DISASSEMBLY INSTRUCTIONS

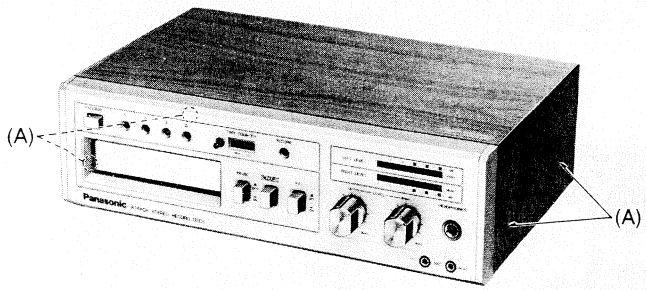


Fig. 1

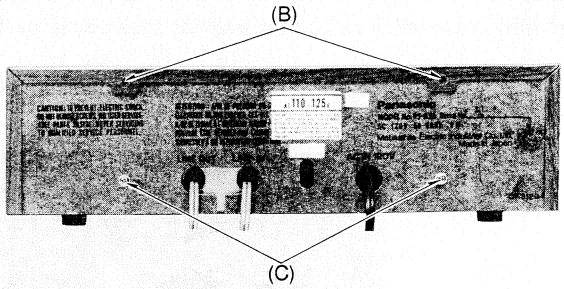


Fig. 2

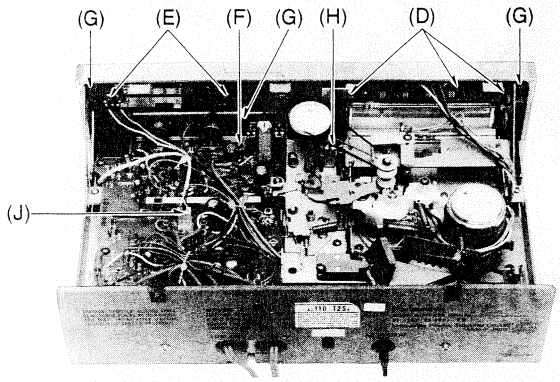


Fig. 3

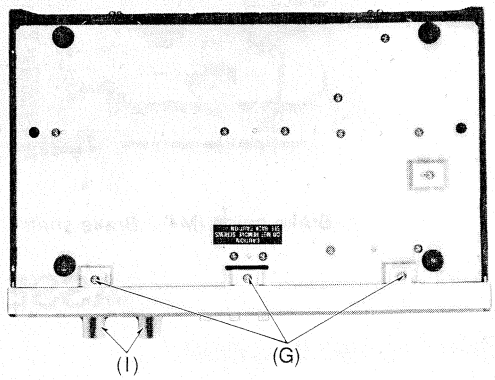
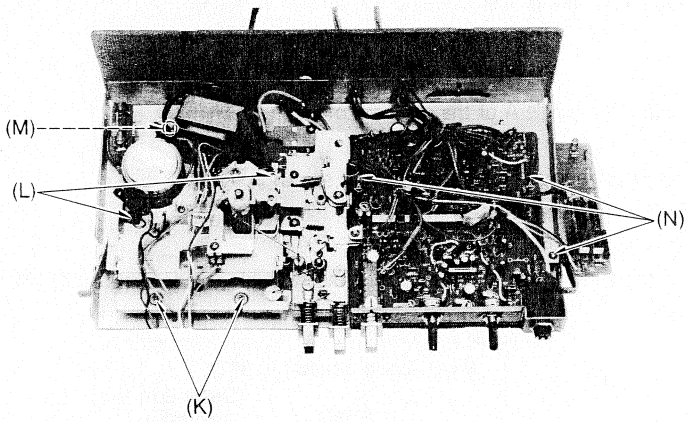


Fig. 4



Notice:
See the disassembly note at page 3.

Ref. No.	Procedure	To remove —— .	Remove —— .	Shown in fig. —— .
1	1	Case cover	• 4 black screws ····· (A) • 2 screws ····· (B)	1 2
2	1→2	Back board	• 2 screws ····· (C)	2
3	1→3	Program circuit board	• 3 red screws ····· (D)	3
4	1→4	Level indicator circuit board	• 2 red screws ····· (E)	3
5	1→3→4→5	Front panel assembly	• 1 red screw ····· (F) • 6 screws ····· (G) • Counter belt ····· (H) • 2 volume knobs ····· (I) • 3 pin socket ····· (J)	3 3, 4 3 4 3
6	1→3→4→5→6	Mechanism unit	• 2 red screws ····· (K) • 2 cord clampers and 2 red screws ····· (L) • Binder ····· (M)	5 5 5
7	1→3→4→5→7	Main circuit board	• 3 red screws ····· (N)	5

DISASSEMBLY NOTE

MECHANISM SECTION:

Remove the brake shaft (M54) from the brake guide (M4) and push the detection rod assembly (M35) up in the direction of arrow A. Remove the mechanism unit while lifting it aslant as shown by arrow B. (shown in fig. A)

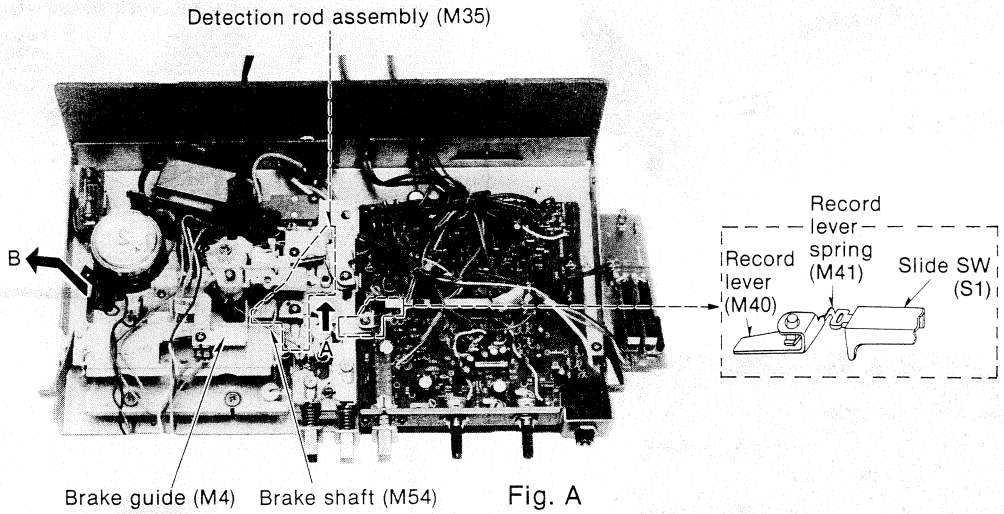


Fig. A

ASSEMBLY NOTES

MAIN CIRCUIT BOARD SECTION:

When mounting the main circuit board, be sure to check that the record/playback select switch (S1) and record lever assembly (record lever (M40) and record lever spring (M41)) are properly positioned. (shown in fig. A)

MECHANISM SECTION:

① Set point A of the mechanism guide angle to angle A of the mechanism unit. (shown in fig. B)
② Lift the left side of the mechanism.
③ Insert the brake shaft into the specified position of the brake guide, as shown in fig. A.
④ Push the detection rod assembly (M35) up in the direction of arrow A. (shown in fig. A)
⑤ Slide the mechanism unit in the direction of arrow C. (shown in fig. B)
At this time, make sure that point B of the detection rod assembly is inserted into the opening between the mechanism unit and metal boss assembly (M2).

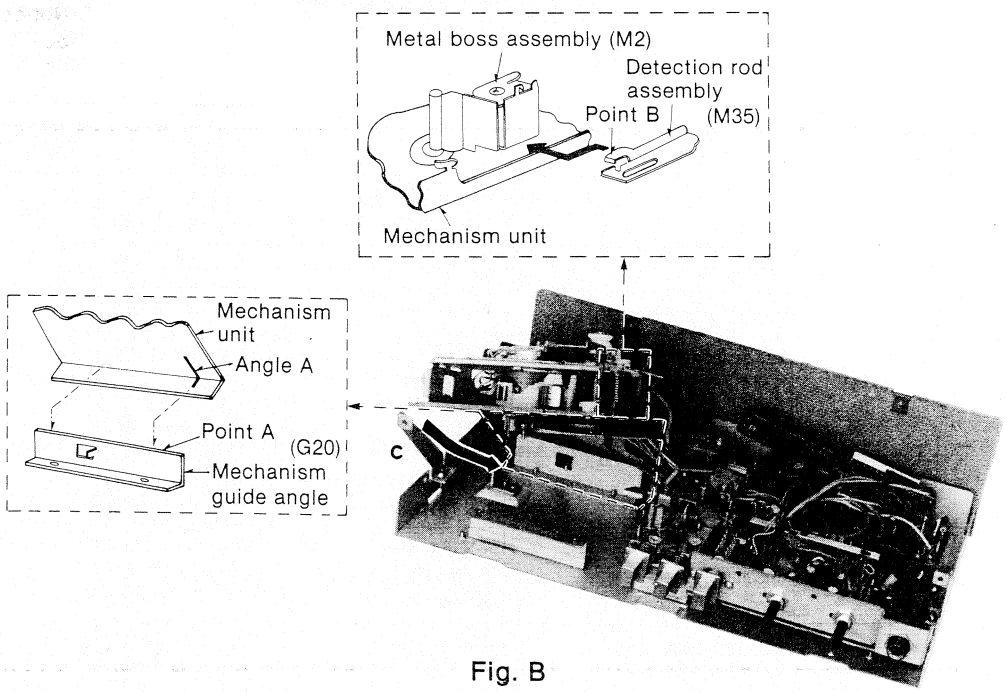
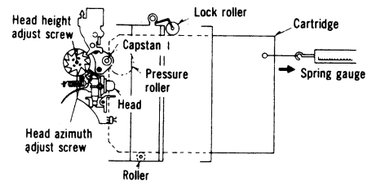
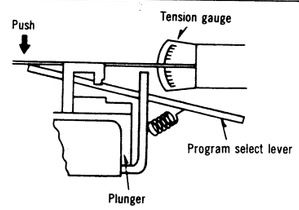
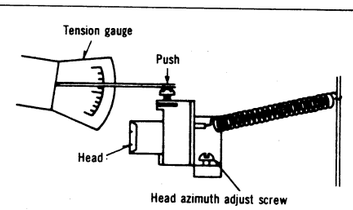
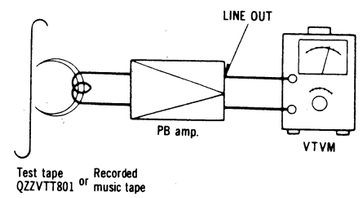
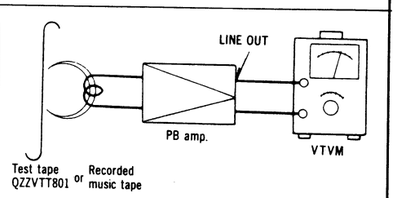
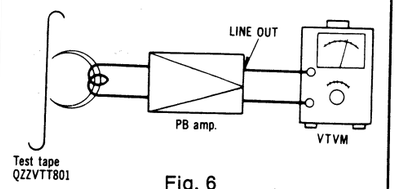
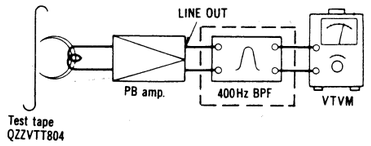
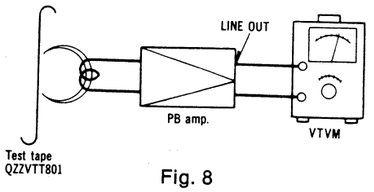
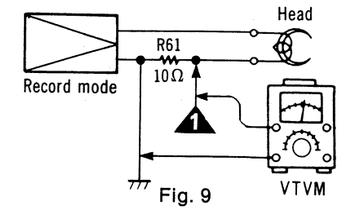
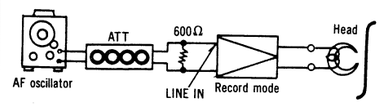
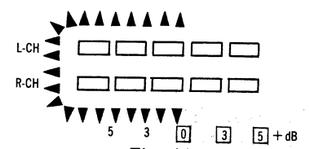
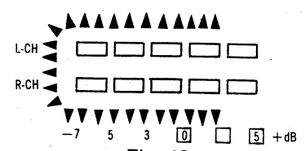


Fig. B

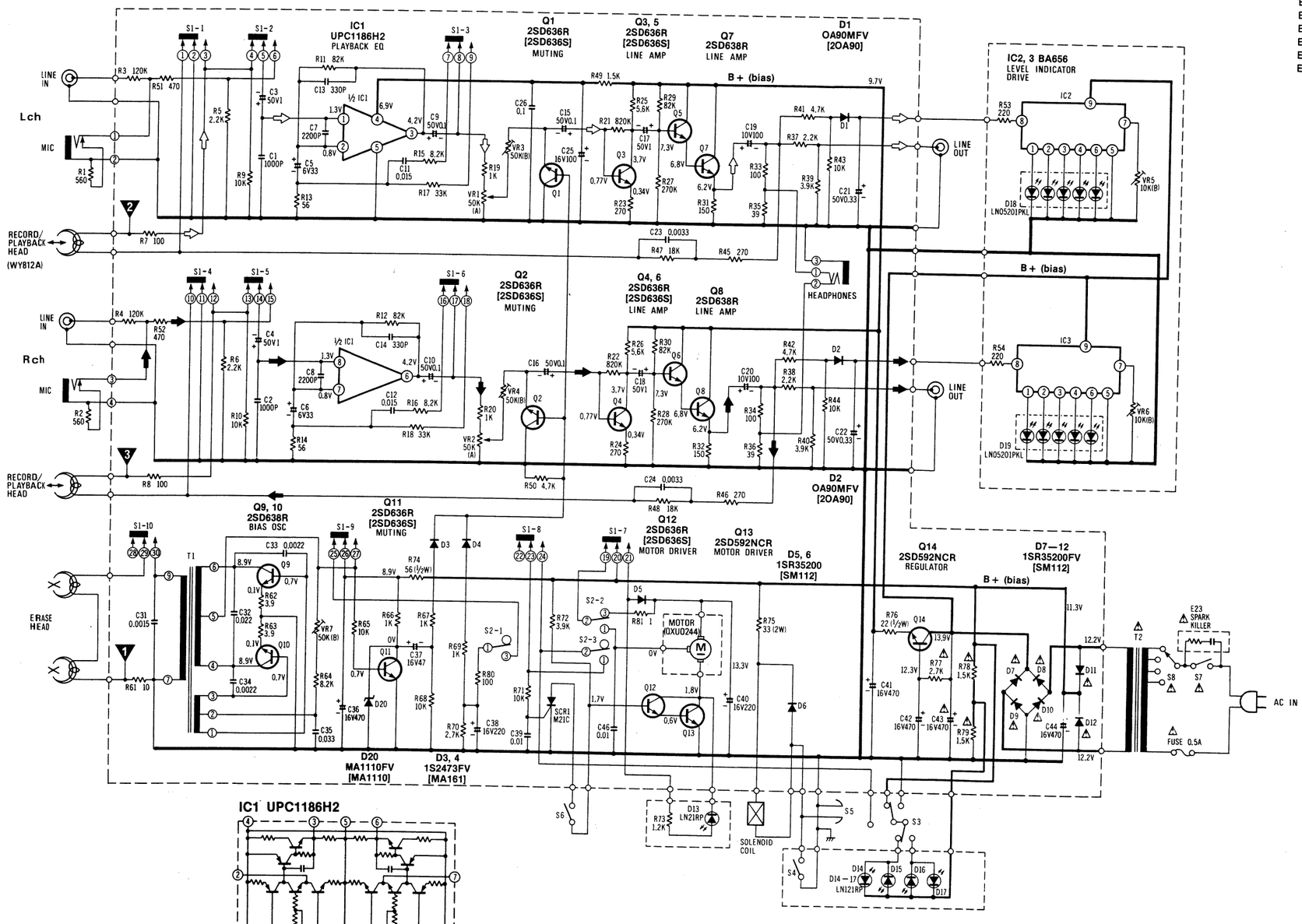
MEASUREMENTS AND ADJUSTMENTS

NOTES: Keep good condition, set switches and controls in the following positions, unless otherwise specified.

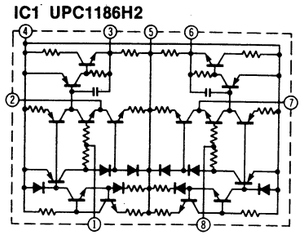
- Make sure head is clean.
- Make sure capstan is clean.
- Judgeable room temperature: 20±5°C (68±9°F)
- Pause switch: OFF
- Fast forward switch: OFF
- Record switch: OFF
- Volume controls: Maximum

STEP	PROCEDURE	METHOD	MEASURING FIGURE
1	Pressure of pressure roller	Insert the standard cartridge in the cartridge slot and take the measurement by pulling it with the spring gauge. **Standard value: 500—850 g**	 Fig. 1
2	Program change load	Apply the tension gauge, push in the arrow direction and measure the maximum value at the end point. **Standard value: less than 2 g**	 Fig. 2
3	Head-up tension	Place the set into the mode of program 1, and take the measurement by pushing the head downward with the tension gauge. **Standard value: 19 g or more**	 Fig. 3
4	Head height rough adjustment	1. Connect the LINE OUT cords to the VTVM. 2. Place the set into the mode of program 1. 3. Play either a test tape QZZVTT801 or recorded music tape. 4. Turn head height adjustment screw counterclockwise to raise head to highest position. 5. Next, turn head height adjustment screw clockwise, gradually lowering head, and stopping where first sound heard is at maximum level.	 Fig. 4 ※ Adjustment point (head height adjust screw) is shown in fig. 1 of step 1.
5	Head azimuth adjustment	1. Connect the LINE OUT cords to the VTVM. 2. Place the set into the mode of program 2. 3. Play either a test tape QZZVTT801 or recorded music tape. 4. Adjust head azimuth screw for maximum level.	 Fig. 5 ※ Head azimuth screw is shown in fig. 3 of step 3.
6	Head height adjustment	1. Connect the LINE OUT cords to the VTVM. 2. Place the set into the mode of program 2. 3. Play the test tape QZZVTT801 and adjust head height adjustment screw for minimum output.	 Fig. 6 ※ Head height adjust screw is shown in fig. 1 of step 1.
7	Crosstalk adjustment	1. Connect the LINE OUT cords to the VTVM. 2. Place the set into the mode of program 1. 3. Play the test tape QZZVTT804 and measure the output (original signal). 4. Changeover to program 2, play and measure the output (crosstalk signal). 5. Read the ratio between original signal and crosstalk signal in dB. 6. Adjustment should be repeated steps 4, 5 and 6 above. **Standard value: more than 50 dB**	 Fig. 7
8	Playback gain adjustment	1. Connect the LINE OUT cords to the VTVM. 2. Play the test tape QZZ8FC and measure the output level on the VTVM. **Standard value: 0.6±0.1 V** 3. If measured value is not within standard, adjust VR3 (L-CH), VR4 (R-CH). (Shown in electrical parts location at page 6.)	 Fig. 8
9	Erase current adjustment	1. Test equipment connection is shown in fig. 9. 2. Place the set into record mode. 3. Read voltage on VTVM and calculate erase current by following formula. Erase current (A) = $\frac{\text{Value read on VTVM (V)}}{10\,\Omega}$ **Standard value: 8±1 mA** 4. If measured value is not within standard, adjust VR7. (Shown in electrical parts location at page 6.)	 Fig. 9
10	Level indicator adjustment	1. Test equipment connection is shown in fig. 10. 2. Place the set into record mode. 3. Supply 1 kHz signal (−24 dB) to the LINE IN cords. 4. Adjust at "0 dB". A. Adjust the ATT so that the output level at LINE OUT cords becomes 0.5 V. B. Adjust VR5 (L-CH), VR6 (R-CH) so that the 0 dB LED lights up (see fig. 11). (Shown in electrical parts location at page 6.) 5. Adjust at "+3 dB". A. Adjust the ATT so that the output level at LINE OUT cords becomes 0.5 V+0.5 dB. B. Adjust VR5 (L-CH), VR6 (R-CH) so that the +3 dB LED lights up (see fig. 12). 6. Repeat twice between 4 and 5 above.	 Fig. 10  Fig. 11  Fig. 12

SCHEMATIC DIAGRAM

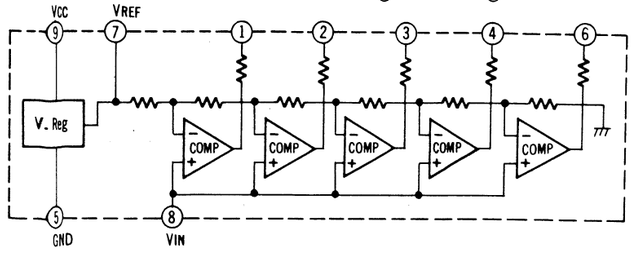


IC1 UPC1186H2



EQUIVALENT CIRCUIT

IC2, 3 BA656



NOTES:

- S1-1—S1-10.....Record/Playback select switch (shown in playback position).
- S2-1—S2-3 .....Fast Forward ON/OFF switch (shown in OFF position).
- S3.....Program indication select (switch shown in program 1 position).
- S4.....Program selector (shown in OFF position).
- S5.....Sensing switch (shown in OFF position).
- S6.....Cartridge detection switch (shown in OFF position).
- S7.....Power ON/OFF switch.
- S8.....AC Power voltage select switch.
- VR1, 2 .....Volume control.
- VR3, 4 .....Playback gain adjustment VR.
- VR5, 6 .....Level indicator adjustment VR.
- VR7 .....Erase current adjustment VR.

- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise. K = 1,000Ω, M = 1,000KΩ.
- Capacity are in microfrads (μF) unless specified otherwise. P = Pico-farads.
- The mark (▼) shows test point. e.g. ▼ = Test point 1.
- All voltage values shown in circuitry are under no signal condition and record mode with volume control at minimum position. For measurement, use VTVM.
- (⇨) this arrow indicates the flow of the playback signal.
- (➡) this arrow indicates the flow of the recording signal.

• This schematic diagram may be modified at any time with the development of new technology.

NOTES: RESISTORS
ERD...Carbon
ERG...Metal-oxide
ERS...Metal-oxide
ERO...Metal-film
ERX...Metal-film
ERQ...Fuse type metallic
ERC...Solid
ERF...Cement

CAPACITORS
ECBA.....Ceramic
ECG□.....Ceramic
ECK□.....Ceramic
ECC□.....Ceramic
ECF□.....Ceramic
ECQM.....Polyester film
ECQE.....Polyester film
ECQF.....Polypropylene
ECE□.....Electrolytic
ECE□N...Non polar electrolytic
ECQS.....Polystyrene
ECS□.....Tantalum
QCS.....Tantalum

REPLACEMENT PARTS LIST

Important safety notice
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Part No.
RESISTORS	
R1, 2	ERD25FJ561
R3, 4	ERD25TJ124
R5, 6	ERD25FJ222
R7, 8	ERD25FJ101
R9, 10	ERD25FJ103
R11, 12	ERD25TJ823
R13, 14	ERD25FJ560
R15, 16	ERD25FJ822
R17, 18	ERD25TJ333
R19, 20	ERD25FJ102
R21, 22	ERD25TJ824
R23, 24	ERD25FJ271
R25, 26	ERD25FJ562
R27, 28	ERD25TJ274
R29, 30	ERD25TJ823
R31, 32	ERD25FJ151
R33, 34	ERD25FJ101
R35, 36	ERD25FJ390
R37, 38	ERD25FJ222
R39, 40	ERD25FJ392
R41, 42	ERD25FJ472
R43, 44	ERD25FJ103
R45, 46	ERD25FJ271
R47, 48	ERD25TJ183
R49	ERD25FJ152
R50	ERD25FJ472
R51, 52	ERD25FJ471
R53, 54	ERD25FJ221
R61	ERD25FJ100
R62, 63	ERD25FJ3R9
R64	ERD25FJ822
R65	ERD25FJ103
R66, 67	ERD25FJ102
R68	ERD25FJ103
R69	ERD25FJ102
R70	ERD25FJ272
R71	ERD25FJ103
R72	ERD25FJ392
R73	ERD25FJ821
R74	ERD50FJ560
R75	ERG2ANJ330
R76	ERD50FJ220
R77 ⚠	ERD25FJ272
R78, 79 ⚠	ERD25FJ152
R80	ERD25FJ101
R81	ERD25FJ1R0
VARIABLE RESISTORS	
VR1, 2	EVHGHAF25A54
VR3, 4	EVNK4AA00B54
VR5, 6	EVNK4AA00B14
VR7	EVNK4AA00B54

Ref. No.	Part No.
CAPACITORS	
C1, 2	ECKD1H102KB
C3, 4	ECEA2AS010
C5, 6	ECEA1CS330
C7, 8	ECKD1H222KB
C9, 10	ECEA1HSR11
C11, 12	ECFWD153MXY
C13, 14	ECKD1H331KB
C15, 16	ECEA1HSR11
C17, 18	ECEA2AS010
C19, 20	ECEA1CS101
C21, 22	ECEA50ZR33
C23, 24	ECFWD332MXY
C25	ECEA1CS101
C26	ECFDD104MXY
C31	ECQM1H152KZ
C32	ECQM1H223KZ
C33, 34	ECKD1H222KB
C35	ECKD1H333ZF
C36	ECEA1CS471
C37	ECEA1ES470
C38	ECEA1CS221
C39	ECFWD103MXY
C40	ECEA1CS221
C41, 42	ECEA1CS471
C43 ⚠	ECEA1CS471
C44	ECEA1CS471
C46	ECFWD103MXY
TRANSISTORS	
Q1, 2, 3, 4, 5, 6	2SD636S
Q7, 8, 9, 10	2SD638R
Q11, 12	2SD636S
Q13, 14	2SD592NCR
DIODES & RECTIFIERS	
D1, 2	2OA90
D3, 4	MA161
D5, 6	SM112
D7, 8, 9, 10, 11, 12	⚠ SM112
D13, 14, 15, 16, 17	LN21RP
D18, 19	LN05201PKL
D20	MA1110
THYRISTOR	
SCR1	M21C
INTEGRATED CIRCUITS	
IC1	UPC1186H2
IC2, 3	QVIBA656

Ref. No.	Part No.	Part Name & Description
TRANSFORMERS		
T1	QLB0170S	Bias Oscillation Transformer
T2 ⚠	QLPN43HJX	Power Transformer
SWITCHES		
S1	QSSA206	Slide Switch (Record/Playback Selector)
S2	QSW4211	Slide Switch (Fast Forward ON/OFF)
S3	Refer to M68 and M71	
S4	QSB0226MS	Rotary Switch (Program Indicator) Leaf Switch (Program Selector)
S5	Refer to M29	Sensing Switch
S6	QSB0232M	Leaf Switch (Cartridge Detection)
S7 ⚠	QSM0062	Micro Switch (Power ON/OFF)
S8 ⚠	QSR1403H	AC Power Voltage Select Switch
JACKS		
J1, 2	QEJ2001	Microphone Jack
J3	QJA0249H	Headphones Jack
FUSE		
F1 ⚠	XBA1E05NR3	Fuse

SPECIFICATIONS

* Volume controls maximum.

Playback frequency response * Use test tape..... QZZ8FC	1kHz: 0dB 100Hz: +1±5dB 7.5kHz: +1±5dB
Playback S/N ratio	40dB or more
Bias oscillation frequency	40±5kHz
Bias current	1.1±0.3mA [Measure at TP2 (L-CH), TP3 (R-CH)]
Standard recording level	MIC: −72±4dB LINE IN: −24±4dB

CIRCUIT BOARDS AND WIRING CONNECTION DIAGRAM

PROGRAM CIRCUIT BOARD

LEVEL INDICATOR CIRCUIT BOARD

S5: SENSING SWITCH

SWITCH (S3) CIRCUIT BOARD

SOLENOID COIL

HEAD

LINE OUT

LINE IN

MAIN CIRCUIT BOARD

IC1 UPC1186H2

1	1.3V	3	4.2V	5	0 V	7	0.8V
2	0.8V	4	6.9V	6	4.2V	8	1.3V

Q5 2SD636R [2SD636S]: B 7.3V, C 9.7V, E 6.8V

Q7 2SD638R: B 6.8V, C 9.7V, E 6.2V

Q14 2SD592NCR: B 12.3V, C 13.9V, E —

Q8 2SD638R: B 6.8V, C 9.7V, E 6.2V

Q6 2SD636R [2SD636S]: B 7.3V, C 9.7V, E 6.8V

Q3, 4 2SD636R [2SD636S]: B 0.77V, C 3.7V, E 0.34V

Q9, 10 2SD638R: B 0.7V, C 8.9V, E 0.1V

Q12 2SD636R [2SD636S]: B 1.7V, C 1.8V, E 0.6V

Q13 2SD592NCR: B 0.6V, C 1.8V, E 0V

Q11 2SD636R [2SD636S]: B 0.7V, C 0V, E 0V

CARTRIDGE DETECTION SWITCH (S6)

MOTOR

MIC IN JACK

T2: POWER TRANSFORMER

S8: AC POWER VOLTAGE SELECT SWITCH

E23: SPARK KILLER

F1: FUSE0.5A

S7: POWER ON/OFF SWITCH

AC POWER CORD

J3 HEADPHONES

SIDE VIEW

IC1 UPC1186H2

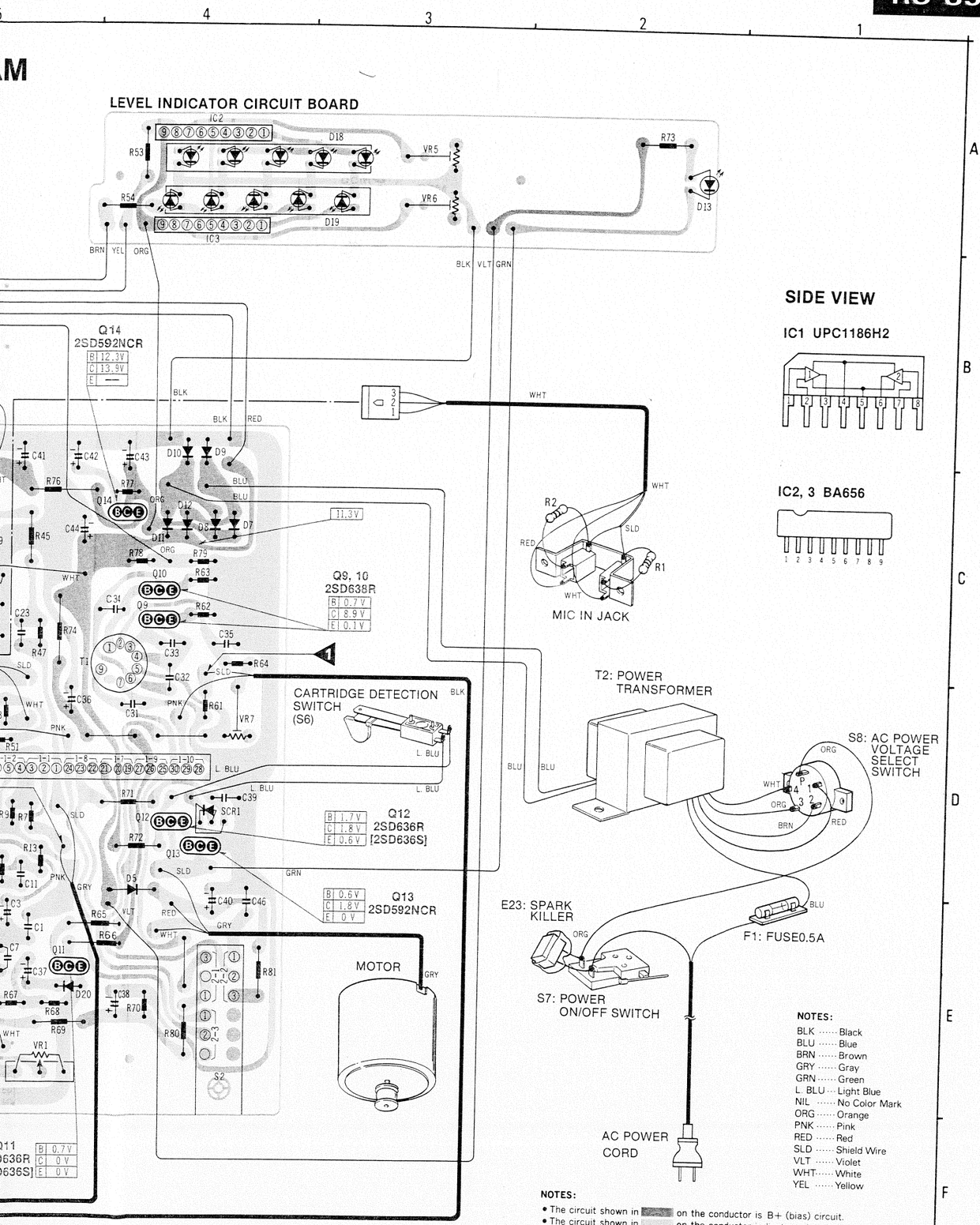
IC2, 3 BA656

NOTES:

BLK ..... Black
BLU ..... Blue
BRN ..... Brown
GRY ..... Gray
GRN ..... Green
L. BLU ... Light Blue
NIL ..... No Color Mark
ORG ..... Orange
PNK ..... Pink
RED ..... Red
SLD ..... Shield Wire
VLT ..... Violet
WHT ..... White
YEL ..... Yellow

NOTES:

- The circuit shown in ▒▒ on the conductor is B+ (bias) circuit.
- The circuit shown in ▒▒ on the conductor indicates printed circuit on the back side of the printed circuit board.
- Values indicated in [ ] are DC voltage between the ground and electrical parts.
- The voltage indicates are measured during record mode.



SIDE VIEW

IC1 UPC1186H2

IC2, 3 BA656

NOTES:

- BLK ..... Black
- BLU ..... Blue
- BRN ..... Brown
- GRY ..... Gray
- GRN ..... Green
- L. BLU ... Light Blue
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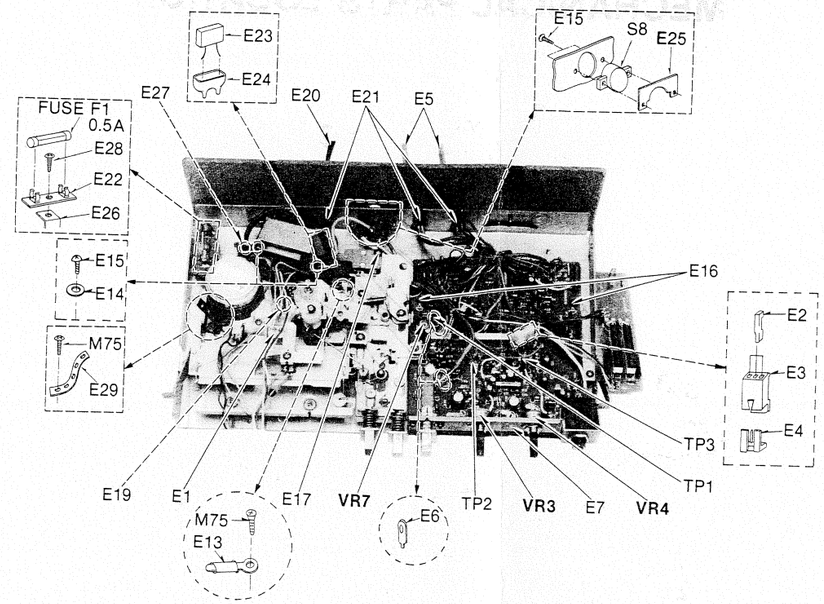
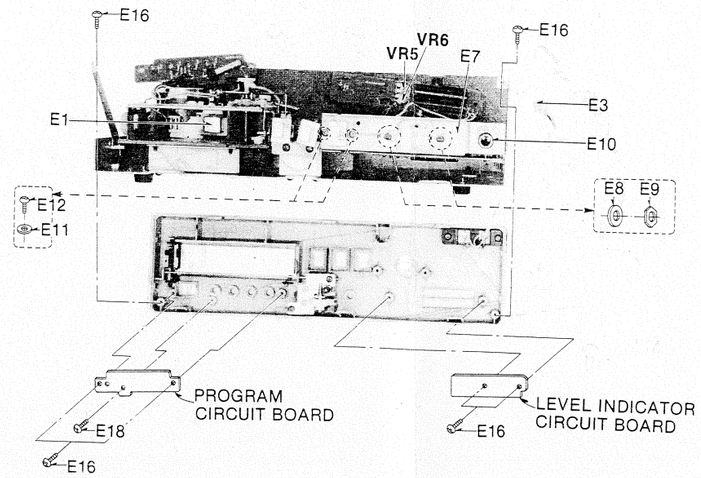
- WHT ..... White
- YEL ..... Yellow

NOTES:

- The circuit shown in ▬ on the conductor is B+ (bias) circuit.
- The circuit shown in ▬ on the conductor indicates printed circuit on the back side of the printed circuit board.
- Values indicated in [ ] are DC voltage between the ground and electrical parts.
- The voltage indicates are measured during record mode.

ELECTRICAL PARTS LOCATION



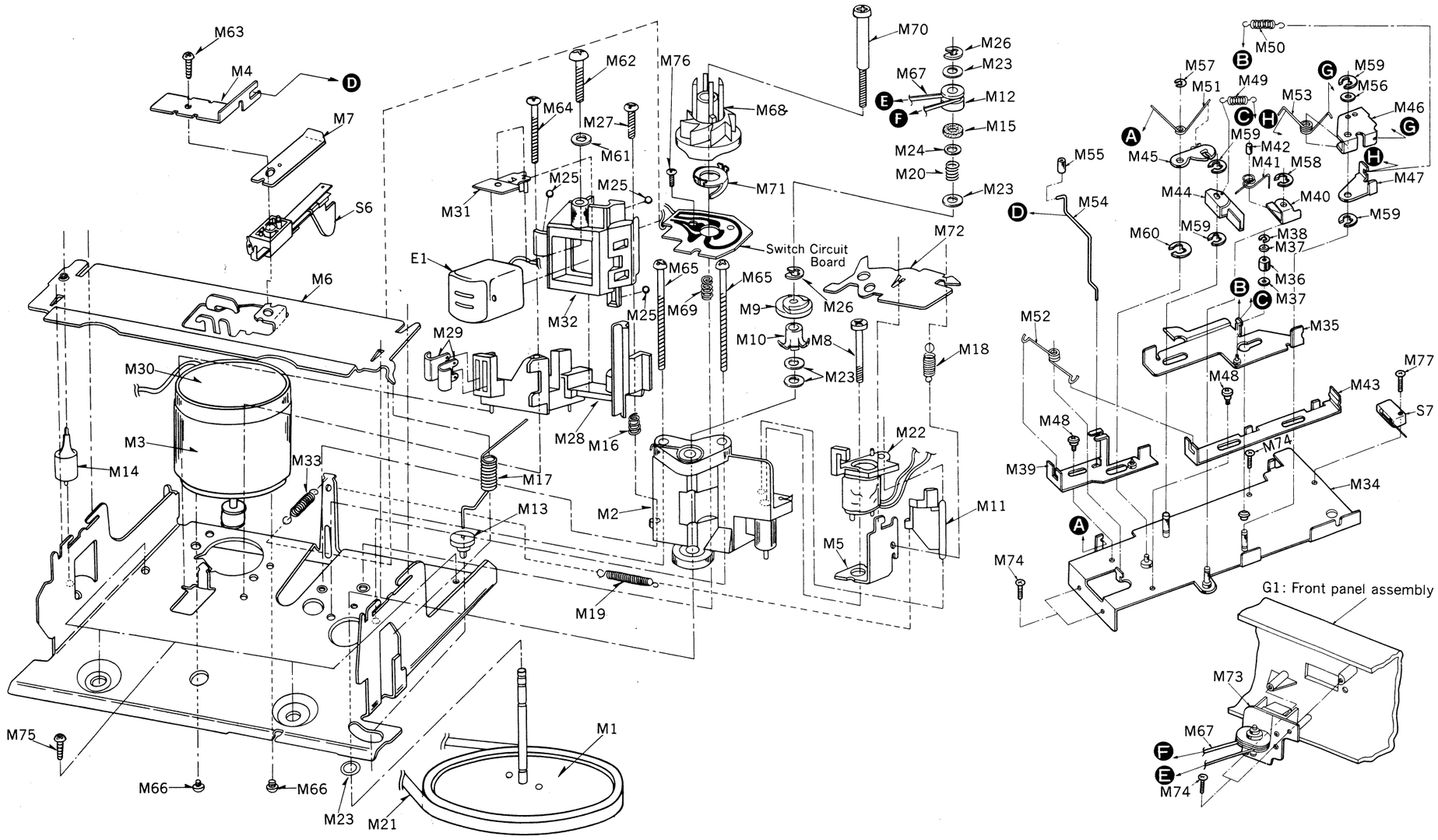


REPLACEMENT PARTS LIST

Important safety notice
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
	ELECTRICAL PARTS		E15	XTN3+6B	Tapping Screw ⊕3×6
E1	WY812A	Head (Record/Playback/Erase)	E16	XTN3+8B	Tapping Screw ⊕3×8
E2	QJT1054	Contact	E17	XTN3+16B	Tapping Screw ⊕3×16
E3	QJS1921TN	3 Pin Socket	E18	XTN26+12B	Tapping Screw ⊕2.6×12
E4	QJP1921TN	3 Pin Post	E19	XTS2+6B	Tapping Screw ⊕2×6
E5	QFC2133	Pin Cord (LINE IN/OUT)	E20 ⚠	RJA52ZB-K	AC Power Cord
E6	QJT1041	Pin Terminal	E21	QTD1129	Cord Bushing
E7	QMA4039	Volume Angle	E22 ⚠	QTF1032	Fuse Holder
E8	XWS8AW	Washer 8φ	E23 ⚠	QCR0008T	Spark Killer
E9	XNS8	Nut 8φ	E24	QTW1118	Spark Killer Cover
E10	QNQ1070	Nut	E25	QMF1982	Switch Angle
E11	XWA3B	Washer 3φ	E26	QMA4329	Fuse Angle
E12	XSN3+6S	Screw ⊕3×6	E27	QTD1181	Nylon Binder
E13	QTD1297	Cord Clamper	E28	XTN3+6B	Screw ⊕3×6
E14	XWG3	Washer 3φ	E29	RME1442A	Binder

MECHANICAL PARTS LOCATION

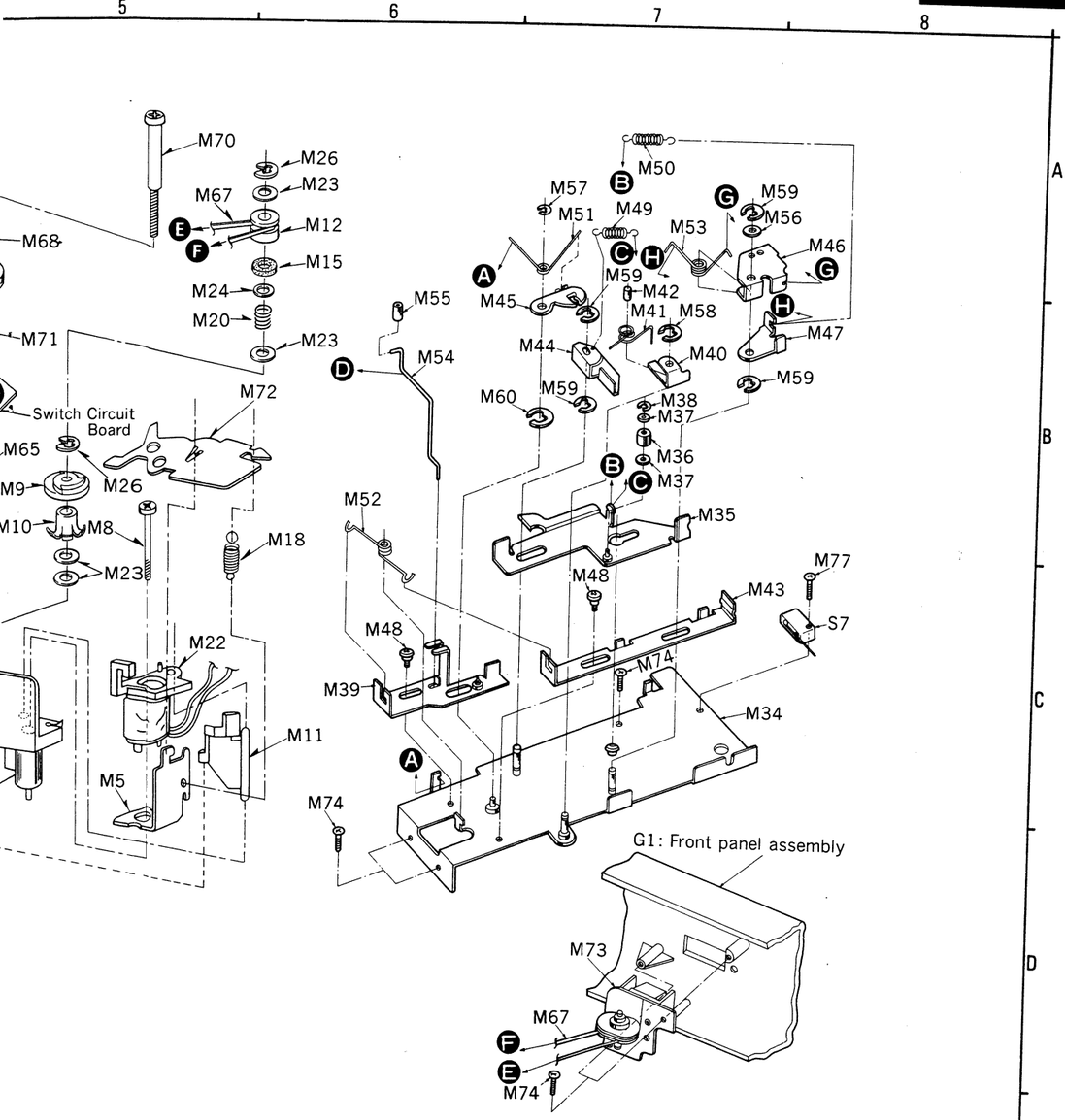


REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description
	MECHANICAL PARTS	
M1	QXF0173	Flywheel Assembly
M2	QMB1275	Metal Boss Assembly
M3	QTS1439	Shield Plate (for Motor)
M4	QMG0100	Brake Guide
M5	QMA3405	Solenoid Angle
M6	QMA3407	Guide Plate
M7	QMF1965	Switch Guard
M8	QHQ1276	Solenoid Core
M9	QDP1882	Ratchet Gear
M10	QMB1362	Ratchet Bush
M11	QML3334	Click Lever
M12	QDP1756	Capstan Pulley
M13	QDP1767	Lock Roller
M14	QDP1768	Guide Roller
M15	QBF1121	Felt
M16	QBC1278	Head Spring
M17	QBN1605	Lock Roller Spring
M18	QBT1811	Selector Spring
M19	QBT1484	Click Lever Spring
M20	QBC1314	Flywheel Spring
M21	QDB0246	Flywheel Belt
M22	QZE0017	Solenoid Coil
M23	QBW2063	Plastic Washer
M24	XWG4	Washer 4ϕ
M25	QDK1012	Steel Ball
M26	XUC3FT	Stop Ring 3ϕ
M27	XTN3+10B	Head Azimuth Adjust Screw
M28	QMA3408	Tape Guide
M29	QMF1979	Sencing Plate
M30	QXU0244	Motor Assembly
M31	QMA3406	Head Plate
M32	QMH2030	Head Supporter
M33	QBT1745	Record Rod Spring
M34	QXK2442	Record Base Plate Assembly
M35	QXR0727	Detection Rod Assembly
M36	QDP1886	Roller
M37	QBW2012	Poly Washer
M38	XUC15FT	Stop Ring 1.5ϕ
M39	QXR0720	Pause Rod Assembly
M40	QML3704	Record Lever
M41	QBN1798	Record Lever Spring
M42	QMC0118	Collar
M43	QMR1898	Record Rod
M44	QML3705	Pause Lever
M45	QML3706	Lock Plate
M46	QML3707	Record Lock Plate-A
M47	QML3708	Record Lock Plate-B
M48	QHQ1285	Screw
M49	QBT1558	Pause Lever Spring
M50	QBT1701	Record Lock Spring-A
M51	QBN1799	Lock Plate Spring
M52	QBN1801	Rod Spring
M53	QBN1800	Record Lock Spring-B
M54	QBN1797	Brake Shaft
M55	QBG1275	Stopper
M56	QBW2063	Plastic Washer
M57	XUC2FT	Stop Ring 2ϕ
M58	XUC25FT	Stop Ring 2.5ϕ
M59	XUC3FT	Stop Ring 3ϕ
M60	XUC5FT	Stop Ring 5ϕ
M61	XWG3	Washer 3ϕ
M62	XTN3+14B	Head Height Adjust Screw
M63	XTN3+12B	Tapping Screw ⊕3×12
M64	XTN3+25B	Tapping Screw ⊕3×25
M65	XTN3+30B	Tapping Screw ⊕3×30
M66	XSN26+3	Screw ⊕2.6×3
M67	QDB0207	Counter Belt
M68	QMD0017	Cam
M69	QBC1278	Head Spring
M70	QHQ1275	Cam Shaft
M71	QBP1891	Contact Plate
M72	QML3333	Program Select Lever
M73	QDC0137	Tape Counter
M74	XTN3+8B	Tapping Screw ⊕3×8
M75	XTS3+6B	Tapping Screw ⊕3×6
M76	XTS2+6B	Tapping Screw ⊕2×6
M77	XTN3+16B	Tapping Screw ⊕3×16

SPECIFICATIONS

Wow and flutter * Use test tape····· QZZ8WA	0.35% or less (RMS)
Tape speed accuracy * Use test tape····· QZZ8WA	±3% or less

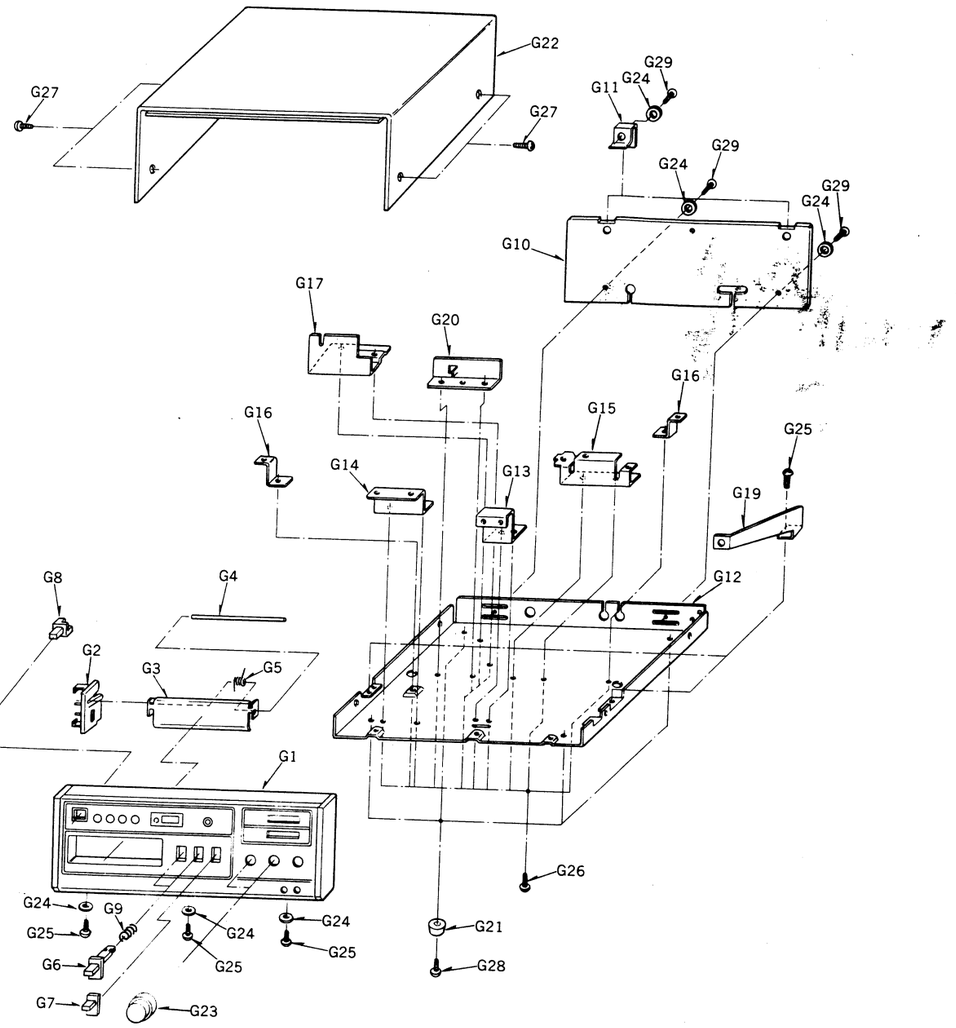


Name & Description	Ref. No.	Part No.	Part Name & Description
ϕ	M58	XUC25FT	Stop Ring 2.5ϕ
sembly	M59	XUC3FT	Stop Ring 3ϕ
Spring	M60	XUC5FT	Stop Ring 5ϕ
	M61	XWG3	Washer 3ϕ
	M62	XTN3+14B	Head Height Adjust Screw
	M63	XTN3+12B	Tapping Screw ⊕3×12
	M64	XTN3+25B	Tapping Screw ⊕3×25
	M65	XTN3+30B	Tapping Screw ⊕3×30
late-A	M66	XSN26+3	Screw ⊕2.6×3
late-B	M67	QDB0207	Counter Belt
	M68	QMD0017	Cam
pring	M69	QBC1278	Head Spring
pring-A	M70	QHQ1275	Cam Shaft
ing	M71	QBP1891	Contact Plate
	M72	QML3333	Program Select Lever
pring-B	M73	QDC0137	Tape Counter
	M74	XTN3+8B	Tapping Screw ⊕3×8
	M75	XTS3+6B	Tapping Screw ⊕3×6
	M76	XTS2+6B	Tapping Screw ⊕2×6
	M77	XTN3+16B	Tapping Screw ⊕3×16

SPECIFICATIONS

Wow and flutter * Use test tape ····· QZZ8WA	0.35% or less (RMS)
Tape speed accuracy * Use test tape ····· QZZ8WA	±3% or less

CABINET PARTS LOCATION



REPLACEMENT PARTS LIST

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Ref. No.	Part No.	Part Name & Description
	CABINET PARTS	
G1	QYP1001	Front Panel Assembly
G2	QGG0167	Guide Plate
G3	QKF1487S	Cartridge Lid
G4	QMN1684	Lid Shaft
G5	QBN7005	Lid Spring
G6	QYQ0300	Push Button Assembly
G7	QGG1431H	Push Button (Fast Forward ON/OFF)
G8	QGG1805	Push Button (Program Selector)
G9	QBC1245	Switch Spring
G10	QKS1302	Back Board
G11	QNQ1096	Reinforcement Plate
G12	QMK1957	Bottom Chassis
G13	QMA4042	Record Angle
G14	QMA4046	Mechanism Angle-A (Front Side)
G15	QMA4047	Mechanism Angle-B (Rear Side)
G16	QMA4043	P.C.B. Angle
G17	QMA4044	Transformer Angle
G19	QMA4040	Panel Reinforcement Angle
G20	QMA4045	Mechanism Guide Angle
G21	QKA1083	Rubber Foot
G22	QGC1201	Case Cover
G23	SBN758	Volume Knob
G24	XWG3	Washer 3ϕ
G25	XTN3+8B	Tapping Screw ⊕3×8
G26	XTN3+6B	Tapping Screw ⊕3×6
G27	XTB3+6BFZ	"
G28	QHQ1299	Screw
G29	XSN3+10S	Screw ⊕3×10
	ACCESSORIES	
A1	QQT3139	Instruction Book
A2 ⚠	XBA1E05NR3	Fuse (Spair)
A3	XZB6X9A05	Poly Bag (for Fuse)
	PACKINGS	
P1	QPN4094	Inside Carton
P2	QPA0588	Cushion
P3	XZB42X46A02	Poly Bag (for Unit)

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